2

**Amendments to the Specification:** 

Please replace paragraph [0010] with the following amended paragraph:

[0010] The hybrid receptacle 16 has a rearward recess 70 formed in the rearward end of the receptacle

body 32, centrally disposed around the longitudinal axis 88. A plurality of bores 68 extend from the

recess 70, through the receptacle body 32 and into a recess 66 formed in the forward face of the

receptacle body 32. The recesses 70 and 68 are preferably coaxial with and concentrically

disposed around the longitudinal axis 88. The bores 68 have central, longitudinal axes which are

angularly spaced equal angular distances around, and which extended parallel to the central longitudinal

axis 88 of the receptacle 16. A termini retainer 64 is provided having slots 65 which extend from the

outer edge of the termini retainer 64 for receiving the bodies of the termini 18, to retain the termini 18

within the bores 68 in the retainer body 32. The termini retainer 64 is slidingly engaged within the recess

66, and has an outside diameter which is smaller than the interior diameter of the recess 66 to provide

clearance such that the termini retainer may move slightly to allow the forward terminal ends of the

termini 18 to move for aligning with mating termini in the hybrid connector 14. The termini retainer 64

is secured to the receptacle body 32 by a fastener 72, which is preferably threaded and fits within

threaded hold hole formed into the receptacle body 32. A bushing 73 is secured to the receptacle body

32 by the fastener 72. The bushing 73 has a larger thickness than the width of the termini retainer 64,

in a direction along the longitudinal axis 88, such that the termini retainer 64 may move slightly in a

direction along the longitudinal axis 88 to allow some float for the termini 18 in the receptacle 16 to

align with mating termini 18 in the hybrid connector 14.

Please replace paragraph [0011] with the following amended paragraph:

[0011] The insert member 28 of the hybrid coupling 12 is formed such that the alignment sleeves 56 are

retained within the insert member 28, along with the termini 18. The connector 14 is mounted to a

hybrid cable 58 by fixedly securing a rear seal body 60 to the cable 58. A centrally disposed support

AMENDMENT AND RESPONSE

member 62 extends from the rearward seal body 60, forward and into the insert member 28. The support member 62 provides a strut for structurally supporting and separating the rear seal body 60 from the insert member 28. The support member 62 provides a strut having a rearward rear portion 78 with 74 with exterior threads for threadingly securing to the forward end of the rear seal body 60. An elongated shank 76 extends forward from the rear portion 74. A retainer ring 78 is disposed to extend around the shank 76, provided by an enlarged portion of the shank 76. A tab 80 extends from a forward terminal end of the shank 76 for being received within an alignment notch 86 of the insert member 28. The insert member 28 has a rearwardly facing, recessed portion 84 for receiving the forward end of the shank 76 and the retainer ring 78. The termini 18 and the contacts 22 are secured by intermating portions of an edge of the retainer ring 78 and an interior surface of the recessed portion 84 of the insert member 28, which are discussed below in more detain in reference to Fig. 9. The hybrid connector 14 and the hybrid receptacle 16 have a longitudinal axis 88.

Please replace paragraph [0012] with the following amended paragraph:

[0012] A retainer sleeve 92 is provided for retaining an outer jacketing of the cable 58 between the retainer sleeve 92 and the rearward rear portion 74 of the central support member 62. The jacketing of the cable 58 is preferably formed of an aramid fiber, such as KEVLAR<sup>TM</sup>. The retainer sleeve 92 has an interior bore having [[a]] an interior tapered portion 94 and a profile 96 which is hex-shaped for mating with an exterior tapered portion 100 and hex-shaped flats 98, respectively, of on the rearward the rear portion 74 of the support member 62. The rearward end of the rear portion 74 of support member 62 is tapered for mating against the interior taper 94 of the retainer sleeve 92, with the jacketing of the cable 58 retained therebetween to fixedly secure the cable 58 in fixed relation to the rear seal body 60. The support member 62 is threadingly secured into the rear seal body 60, to pull the tapered rear portion 74 of the support member 62 into the interior taper 94 of the retainer sleeve 92, wedging a jacketing of the cable 58 between the interior taper 94 and the tapered rear portion 74 of the support member 62 to secure the rear seal body 60 and the support member to the cable 58. The retainer sleeve 92 is secured within a socket 93 which provides and annular shaped shoulder 95 against which the retainer sleeve 92 is pressed b the rearward, tapered terminal end of the support member 62. As shown, the retainer sleeve

S/N 10/078,166

Atty. Docket. No. FBSI-25,639

4

92 is a separate member from the rear seal body 60, but in other embodiments, the retainer sleeve 92 may

integrally formed as a single part which includes the rear seal body 60. The retainer sleeve 92 and the

rear seal body 60, whether separate components or together formed as a singular piece, may be formed

of metal or molded from plastic.

Please replace paragraph [0016] with the following amended paragraph:

[0016] Fig. 6 is a longitudinal section view of the support member 62, taken along section line 6-6 of

Fig. 5A. The support member 62 has a passage 172 which extends from the rearward terminal end of

the support member 62, to an intermediate portion thereof, which is proximate to the forward end of the

rearward rear portion 74, and adjacent to the rearward end of the shank 76. Preferably, the passage 172

has three sections, a rearward section 174 which extends froward forward from the rearward terminal

end of the support member and then divides into two sections 176 and 178 in a Y-type of configuration.

This Y type of configuration provides two exit points with the apertures 180 and 182, such that a large

enough cross-sectional area will be provided by the apertures 180 and 182 so that a smaller bore may

be used to define the internal diameter of the passages 176 and 178. The rearward passage 174 may have

a larger internal diameter than the forward passages 176 and 178. The electrical conductors 26 and the

optical fibers 20 are both passed through the passage 17, and wound around the shank 76. Wrapping

the electrical conductors 26 and the optical fibers 20 about the shank 76 provides a minimum bend radius

for the optical fibers and sufficient slack for both the optical fibers 20 and the electrical conductors 26

to allow for rebuilding of one of the termini 18 without requiring all of the termini 18 included within

the hybrid connector 14 having to be rebuilt.

Please replace paragraph [0018] with the following amended paragraph:

[0018] Fig. 8 is a sectional view of the insert 28, and the shank 76 and retainer ring 78 of the support

member 62, taken along section line 8-8 of Fig. 2 after the retainer ring 78 is inserted within the insert

28 to retain the termini 18 and the electrical contacts 22 within the insert 28. The inner surface of the

AMENDMENT AND RESPONSE

recessed portion 84 of the insert 28 is shaped to define a profile 212 having a plurality of portions 214 and 216. The portions 214 of the profile 212 for matingly receive the portions 200 of the periphery 196 of the retainer ring 78. The portions of the profile 212 are arcuately shaped for being spaced apart from the portions 202 of the profiles 196 and 198 together define bores 220 within which the termini 18 are disposed. The profile 212 of the recess 84 is further formed to have a shape which provides an inwardly protruding member which defines keying members 218 which matingly engage the portions of the profiles 196 and 198 defined by the shape of the profiles 196 and 198 to angularly align the retainer ring 78 and shank 76 within the recess 84 of the insert member 28. That is, the general shape of the profile 212 is defined in relations to the general shape of the profiles 196 and 198 to provide a keying arrangement for angularly aligning the retainer ring 78 of the support member 62 to align contacts 22 and the termini 18 within particularly defined portions 216 of the insert member 28. The tab 80 (shown in Fig. 8 Fig 7) is offset to one side of the forward face of the shank 76 such that only particular ones of the portions 202 of the profiles 196 and 198 will be aligned with particular ones of the portions 216 of the profile 212. The profile 212 and the profiles 196 and 198 are sized to provide a clearance therebetween, to allow slight adjustment of the terminal 18 for aligning with mating termini. The length of that portion of the shank 76 of the support member 62 which extends forward of the shoulder 194 of the retainer ring 78 is of a length to allow the termini 18 to move for slight distances parallel to the longitudinal axis 88, being pushes forward by the spring 244 to provide means for alignment of the termini 18 with mating termini. However the overall length of the support member 62 is such that the shank 76 is compressed between the insert 28 and the real seal body 60, such that no clearances are provided for movement of the support member 62 after the hybrid connector is fully assembled.

Please replace paragraph [0019] with the following amended paragraph:

[0019] Fig. 9 is a longitudinal section view of a terminus assembly 232, which may be used for the termini 18 in he hybrid connector 14 and in the hybrid receptacle 16. The terminus assembly 232 includes a ferrule 234, which is preferably formed of a ceramic material. A terminus body 236 is preferably formed of metal, and has enlarged end portion 238 having a socket 248 within which the ferrule 234 is press fit. A retainer ring 240 is press fit on the rearward end of the terminus body 236.

AMENDMENT AND RESPONSE

S/N 10/078,166

Atty. Docket. No. FBSI-25,639

A spring retainer ring 242 is preferably annular-shaped and slidably fits around the exterior of the terminus body 236. A coil spring 244 extends around the body 236, between the enlarged end portion 238 of the body 236 and the spring retainer ring 242. The spring retainer ring 242 is disposed between the spring 244 and the retainer ring 240. A bore 246 extends frm the rearward terminal end of the terminus body 236 to the socket 248. The socket 248 is formed in the forward end of the terminus body 236, and preferably has a slight taper for receiving the rearward terminal end of the ferrule 2234, which is press fit into the socket 248. A guide taper 250 is provided in the rearward [[most]] terminal end of the ferrule 234 for guiding an optical fiber into the bore 252. The bore 252 extends through the ferrule 234, from the guide taper 250 to the forward end face 254 of the ferrule 234. The end face 254 is polished along with a terminal end of an optical fiber, and preferably an optical coupling gel is placed on the forward end for coupling to another termini.